

IN THE CLAIMS:

Substitute the following claims for the claims currently pending in the application.

1. (original) An apparatus for redirecting fluid flow therethrough, the apparatus comprising:

a flow passage extending in the apparatus;

a flow region in communication with the flow passage;

a tool operative in conjunction with fluid in the flow region; and

multiple flow restrictors in the flow passage, the flow restrictors being operative to influence at least a portion of the fluid to flow from the flow passage to the flow region.

2. (original) The apparatus according to claim 1, wherein the flow restrictors include projections extending into the flow passage.

3. (original) The apparatus according to claim 2, wherein the projections are generally annular-shaped.

4. (withdrawn) The apparatus according to claim 1, wherein the flow restrictors include recesses extending outwardly from the flow passage into a sidewall surrounding the flow passage.

5. (withdrawn) The apparatus according to claim 1, wherein a resistance to fluid flow through the flow restrictors varies in response to a rate of fluid flow through the flow passage.

6. (withdrawn) The apparatus according to claim 1, wherein a internal dimension permitting access through the flow restrictors varies in response to a rate of fluid flow through the flow passage.

7. (withdrawn) The apparatus according to claim 1, wherein the flow restrictors influence the fluid to rotate about a longitudinal axis of the flow passage.

8. (original) The apparatus according to claim 1, wherein the flow restrictors form alternating fluid expansion and contraction regions in the flow passage.

9. (withdrawn) The apparatus according to claim 1, wherein the flow restrictors are generally helically configured about the flow passage.

10. (original) The apparatus according to claim 1, wherein the tool is an electrical power generator which operates in response to fluid flow through the flow region.

11. (original) An electrical power generating system for use in a subterranean well, the system comprising:

a first flow passage formed through a tubular string in the well;

a flow region in communication with the first flow passage;

an electrical power generator operative in response to flow of fluid through the flow region; and

multiple flow restrictors in the first flow passage, the flow restrictors being operative to influence at least a portion of the fluid to flow from the first flow passage through the flow region.

12. (original) The system according to claim 11, wherein the flow region comprises a second flow passage, and wherein each of a flow inlet and a flow outlet of the second flow passage is in communication with the first flow passage.

13. (withdrawn) The system according to claim 11, wherein the flow region comprises a lateral extension of the first flow passage, with no flow barrier between the first flow passage and the flow region.

14. (withdrawn) The system according to claim 11, wherein the flow restrictors influence the fluid to rotate about a longitudinal axis of the first flow passage.

15. (original) The system according to claim 11, wherein the flow restrictors comprise generally annular-shaped rings projecting inwardly into the first flow passage.

16. (original) The system according to claim 15, wherein each of the rings has a generally rectangular cross-section.

17. (original) The system according to claim 15, wherein each of the rings has a generally wedge-shaped cross-section.

18. (original) The system according to claim 17, wherein a laterally inclined face of each of the rings is oriented in an upstream direction relative to the first flow passage.

19. (withdrawn) The system according to claim 15, wherein the rings are generally helically configured.

20. (withdrawn) The system according to claim 15, wherein the rings influence the fluid to rotate about a longitudinal axis of the first flow passage.

21. (original) The system according to claim 11, wherein the flow restrictors comprise projections extending into the first flow passage, the projections being spaced apart in the first flow passage.

22. (withdrawn) The system according to claim 21, wherein the projections are circumferentially and longitudinally spaced apart in the first flow passage.

23. (withdrawn) The system according to claim 21, wherein the projections are helically distributed in the first flow passage.

24. (withdrawn) The system according to claim 21, wherein the projections influence the fluid to rotate about a longitudinal axis of the first flow passage.

25. (original) The system according to claim 21, wherein each of the projections has a generally rectangular cross-section.

26. (original) The system according to claim 21, wherein each of the projections has a generally wedge-shaped cross-section.

27. (original) The system according to claim 26, wherein a laterally inclined face of each of the projections faces in an upstream direction relative to the first flow passage.

28. (withdrawn) The system according to claim 21, wherein each of the projections has a generally hemispherical shape.

29. (withdrawn) The system according to claim 21, wherein each of the projections has a generally tetrahedron shape.

30. (withdrawn) The system according to claim 21,
wherein each of the projections has a generally pyramid shape.

31. (withdrawn) The system according to claim 21,
wherein fluid flow between first and second ones of the
projections is directed to impinge on a third one of the
projections.

32. (withdrawn) The system according to claim 21,
wherein each of the projections is a whisker.

33. (withdrawn) The system according to claim 32,
wherein the whiskers are grouped into spaced apart bands in the
first flow passage.

34. (withdrawn) The system according to claim 33,
wherein the bands form alternating fluid expansion and
contraction regions in the first flow passage.

35. (withdrawn) The system according to claim 11,
wherein the flow restrictors comprise recesses formed in a wall
surrounding the first flow passage.

36. (withdrawn) The system according to claim 35,
wherein each of the recesses has a generally rectangular
profile.

37. (withdrawn) The system according to claim 35,
wherein each of the recesses has a generally wedge-shaped
profile.

38. (withdrawn) The system according to claim 37,
wherein a laterally inclined face of the profile faces in an
upstream direction relative to the first flow passage.

39. (withdrawn) The system according to claim 35,
wherein the recesses are generally annular-shaped.

40. (withdrawn) The system according to claim 35,
wherein the recesses are generally helically configured about
the flow passage.

41. (withdrawn) The system according to claim 35,
wherein the recesses influence the fluid to rotate about a
longitudinal axis of the first flow passage.

42. (withdrawn) The system according to claim 11,
wherein the flow restrictors are formed on a generally bellows-
shaped device.

43. (withdrawn) The system according to claim 42,
wherein the device is expandable in a longitudinal direction
relative to the first flow passage.

44. (withdrawn) The system according to claim 42, wherein the device has a minimum internal dimension which varies in response to a rate of fluid flow through the first flow passage.

45. (withdrawn) The system according to claim 44, wherein the minimum internal dimension decreases as the rate of fluid flow increases.

46. (withdrawn) The system according to claim 44, further comprising a biasing device which biases the bellows-shaped device to a configuration in which the minimum internal dimension is at a maximum value.

47. (withdrawn) The system according to claim 42, wherein the device increasingly influences the fluid to flow through the flow region, instead of through the first flow passage, as the rate of fluid flow increases.

48. (withdrawn) The system according to claim 11, wherein the flow restrictors are grouped in longitudinally spaced apart sets of multiple ones of the flow restrictors which thereby form alternating fluid expansion and contraction regions in the first flow passage.

49. (withdrawn) The system according to claim 11,
wherein the flow restrictors are positioned upstream of the flow
region.

50. (withdrawn) The system according to claim 49,
wherein the flow restrictors influence the fluid to rotate about
a longitudinal axis of the first flow passage, thereby directing
the fluid to flow laterally into the flow region.

51. (withdrawn) The system according to claim 11,
wherein the flow restrictors are helically configured relative
to a longitudinal axis of the first flow passage.

52. (withdrawn) The system according to claim 11,
wherein the flow restrictors have multiple different spacings
therebetween.

53. (withdrawn) The system according to claim 52,
wherein the different spacings are alternated along the first
flow passage.

54. (withdrawn) The system according to claim 11,
wherein the flow restrictors have multiple different sizes.

55. (withdrawn) The system according to claim 11,
wherein the flow restrictors are grouped into multiple sets of
the flow restrictors, a first set of the flow restrictors

influencing the fluid to rotate in a first direction relative to a longitudinal axis of the first flow passage, and a second set of the flow restrictors influencing the fluid to rotate in a second direction opposite to the first direction relative to the first flow passage axis.

56. (withdrawn) The system according to claim 55, wherein each of the sets includes multiple ones of the flow restrictors.

57. (original) The system according to claim 11, wherein each of the flow restrictors has an opening formed therethrough, and wherein the fluid flows through the openings when the fluid flows through the first flow passage.

58-72. (canceled)

73. (original) An apparatus for redirecting fluid flow therethrough, the apparatus comprising:

a first flow passage extending in the apparatus, the first flow passage being configured for flow of fluid therethrough, and for well tool access therethrough;

a flow region in communication with the first flow passage on a lateral side of the first flow passage; and

multiple flow restrictors in the first flow passage, the flow restrictors influencing the fluid to flow away from the first flow passage.

74. (original) The apparatus according to claim 73, wherein the flow restrictors influence the fluid to flow toward the flow region.

75. (original) The apparatus according to claim 73, wherein the flow restrictors influence the fluid to flow toward an electrical power generator in the flow region.

76. (original) The apparatus according to claim 73, wherein the flow restrictors influence the fluid to flow toward a fluid sampler in the flow region.

77. (original) The apparatus according to claim 73, wherein the flow restrictors influence the fluid to flow toward a fluid sensor in the flow region.

78. (original) The apparatus according to claim 73, wherein the flow region is laterally recessed into a sidewall of the first flow passage.

79. (original) The apparatus according to claim 73, wherein the flow region is formed in a second flow passage at least partially isolated from the first flow passage by a wall therebetween.

80-95. (canceled)